their backs, presenting their claws and open bills, at the same time making as much noise as they were able.

"Probably the nursery of these Hobbies had originally been built by Crows (*Corvus macrorhynchus*), and had been altered to suit the requirements of the former."

The eggs sent me from Tibet were taken for me near Yatung by Mr. D. Macdonald at an elevation of over 12,000 feet, and were deposited in an old Magpie's nest in a small strinted tree. Originally there were no fewer than five, but two of these were hopelessly smashed on their way home.

I have two other clutches of eggs of this Hobby in my collection taken respectively by Cols. R. N. Rattray and Kenneth Buchanan, the former near Gulmurg in Kashmir, the latter at Changla Gali in the Murree Hills, but I have no notes with them beyond the fact that they were both taken from nests in high trees.

These nine eggs, together with three others taken in Eastern Turkestan vary in length from  $40 \cdot 1$  mm. to  $41 \cdot 6$  mm., and in breadth from  $31 \cdot 2$  mm. to  $33 \cdot 5$  mm., the average of the twelve being  $41 \cdot 2 \times 32 \cdot 4$  mm.

They are typical Hobbies' eggs in every respect, shape, texture, and coloration, and could be matched exactly in any ordinary series of eggs of *F. subbuteo subbuteo*, but one egg (Plate V. fig. 5) is a rather exceptionally handsome one, with a very bright pale ground-colour and very pink-red markings.

XIII.—Note on the Acclimatisation of the Australian Black Swan (Chenopsis atrata). By R. T. Gunther, M.A., F.Z.S.

## (Text-figure 2.)

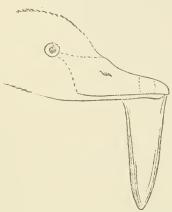
WHILE a bitterly cold north-easter was blowing across the river, our common Thames swans were all keeping positions in mid-stream with their heads tucked under their wings to shelter their long necks from the nipping and eager air.

The Australian swan, on the other hand, was swimming about with neck erect, though evidently greatly disliking the wind.

The unusually cold winter has severely tested the powers of endurance of our guest from the latitudes of the Swan River, where the climate, as indicated by an average winter temperature of about 55°, must resemble that of Gibraltar. Since 1904 we have been keeping a pair of these handsome birds, the gift of the Vintners' Company, upon the river Cherwell at Magdalen College. Since the outbreak of war and the departure of the undergraduates, the male bird has preferred the wider reaches of the Isis, and especially that more open meadow-land known to rowing men as the "Green Bank," to the narrower water-lanes of the Cherwell overhung with trees. It may be that in wet weather the constant drip of water from the overarching branches was an annovance; perhaps the attraction was,—to be seen by, and yet remain aloof from, the numerous company of Thames swans (sixteen on occasion in this reach this winter).

On Sunday January 28 the main river became blocked with ice-floes and ground-ice, from the "Gut" to Magdalen Barge. By next morning the barrier extended up to my house on the river at Folly Bridge, and one Black Swan was cut off from his feeding-place at the Magdalen waterwalks by rough pack-ice. He soon found consolation in making cupboard love to the cook at the water-gate, and consumed scraps of bread in quantities that were positively unpatriotic. During Monday night the thermometer fell to twelve degrees below freezing, and on the following morning our attention was attracted by the crowd that gathers on the bridge for an unusual sight, such as when a fish is caught, or a boy tumbles into the river, or a barge sticks under the bridge and bargee language won't move it. The sight in this case was the Black Swan swimming about in perplexity, unable to open his red bill, which was firmly frozen up with a thick pendant icicle four or five inches in length, hanging from the horny mandible. With every dip into the freezing water the impediment grew longer. Fortunately, however, the sun soon came out, and the hungry bird, attracted by his friend at the gate, hit on the expedient of knocking his bill against the wall and recovered his power of feeding.





Head of the Black Swan with an icicle attached to the lower mandible, about \( \frac{1}{2} \) nat. size.

That swans are among the older inhabitants of this cold country is indicated by the remains both of Whooper and of Bewick's Swans in the superficial deposits of Thames gravel. While fully granting that the bones may have been those of migrant birds, I would suggest that even those contemporaries of the Mammoth are likely to have known how to keep their heads and necks warm in a freezing wind. One might even go further and explain the origin of the gleaming whiteness of the swan as an Arctic characteristic, partly to secure invisibility in snow and partly, as Lord Walsingham \* would have us believe, to check loss of heat by radiation. Black Swans come from warmer climes, and now, owing to inability, or to ignorance of how to effect a

<sup>\*</sup> Trans. York. Nat. Union, ser. D. Articulata, 1885, p. 122.

wrapping up, would perish from an exposure that would not hurt our white birds.

What is certain is that the temperature of the tips of the bills of many birds, both in hard weather and when flying at considerable altitudes, must not infrequently fall considerably below 32° Fahrenheit.

## XIV.—Obituary.

## (Plate VI.)

WE regret that we have to add three more names of Members of the Union who have given up their lives for their country:—Capt. F. C. Selous, Capt. Lord Lucas, and Commdr. The Hon. R. O. B. Bridgeman. With those already recorded, namely, Lieut. K. F. Meiklejohn, Capt. Lord Brabourne, Lieut. C. M. Dyer, Lieut. R. B. Woosnam, Capt. the Hon. Gerald Legge, Major C. H. T. Whitehead, Capt. E. F. Penn, Col. C. Stonham, Col. H. H. Harington, Lt.-Col. B. R. Horsbrugh, Capt. J. M. Charlton, and Capt. J. C. Crowley, our roll of honour now contains the names of fifteen Members of the Union.

## Frederick Courteney Selous. (Plate VI.)

The tragic news of the death in action of Capt. Selous, D.S.O., in East Africa on January 4 last was universally received in all English-speaking countries with a deep sense of loss and with a feeling of intense admiration for one who, at the age of sixty-four, insisted, and rightly so, on his fitness to take up arms for his country. Joining the 25th Service Battalion of the Royal Fusileers (known as the Frontiersmen), he was gazetted 2nd Lieutenant in February 1915 and became Captain the following August. He proceeded to East Africa and served under General Smuts. In September last year he was mentioned in dispatches, and was awarded the Distinguished Service Order for his invaluable services.

Selous was born in London on December 31, 1851, of